

### REMARKS

Applicant has carefully studied the Office Action of May 19, 2005, and offers the following remarks to accompany the above amendments.

Initially, Applicant corrects three typographical errors in the specification. No new matter is added, but the specification is now in better form.

Applicant appreciates the allowance of claims 8-16 and the indication of allowable subject matter for claims 18-23, 27-30, and 32.

Claims 17, 25, and 31 were rejected under 35 U.S.C. § 103 as being unpatentable over Lu et al. (hereinafter "Lu") in view of Cai et al. (hereinafter "Cai").

Applicant respectfully traverses the rejection of claims 17, 25, and 31. For the Patent Office to combine references in an obviousness analysis, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). While the range of available sources to find a suggestion to combine the references is broad, the breadth does not diminish the requirement for actual evidence. *Id.*

Once the combination is made, to establish *prima facie* obviousness, the Patent Office must still show where in the combination each and every claim element is located. MPEP § 2143.03. It is possible that a valid combination may be modified to show a missing claim element. However, before the Patent Office can modify a combination, the Patent Office must articulate a motivation to modify the combination and show from where that motivation to modify comes. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

The Patent Office asserts that the motivation to combine Lu and Cai is "to provide variable dispersion compensation to the signals." (Office Action of May 19, 2005, page 3, lines 4-5). This motivation lacks the requisite actual evidence. Since the motivation lacks the evidence required by the Federal Circuit, the motivation is improper. Since the motivation is improper, the combination is improper. Since the combination is improper, and the references individually admittedly do not teach or suggest all the claim elements, the Patent Office has not established obviousness. Since the Patent Office has not established obviousness, the claims are allowable.

Applicant further traverses the motivation to combine the references because the motivation fails to suggest the combination. If the motivation is to provide variable dispersion compensation, then Cai alone solves this problem without needing to be combined with Lu. That is, Cai teaches a tunable dispersion-compensating element. If an artisan was looking for a way to provide variable dispersion compensation, the artisan would use Cai alone and would have no need of Lu's system to provide variable dispersion compensation. As such, the motivation proffered by the Patent Office does not suggest the combination. Since the motivation does not suggest the combination, the combination is improper. Since the combination is improper, and the references individually admittedly do not teach or suggest all the claim elements, the Patent Office has not established obviousness. Since the Patent Office has not established obviousness, claims 17, 25, and 31 are allowable for this reason as well.

Applicant still further traverses the rejection because the Patent Office is impermissibly modifying the combination. As noted above, the Patent Office may modify a valid combination if there is a suggestion to do so. The Patent Office states that rearrangement of parts involves only routine skill in the art and would be obvious. However, the mere fact that the parts could be rearranged is not sufficient to support a finding of obviousness. There must be a motivation or reason to make the changes. MPEP § 2144.04. Thus, the Patent Office's assertion that rearranging the parts would be obvious is tantamount to an unsupported modification to modify the combination. Unsupported modifications to modify combinations are not permissible. Since the modification is improper, and the combination admittedly does not show all the claim elements, the combination does not establish obviousness. Since the combination does not establish obviousness, the claims are allowable.

Claim 24 was rejected under 35 U.S.C. § 103 as being unpatentable over Lu in view of Cai, and further in view of Gloeckner et al. (hereinafter "Gloeckner"). Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

As noted above, the underlying combination of Lu and Cai is improper. As such, the rejection of claim 24 is improper for at least this reason.

Applicant further traverses the combination of Gloeckner as not being properly supported. The Patent Office asserts that the motivation to combine Gloeckner is "to provide the information of a possible failure of the switch." (Office Action of May 19, 2005, page 4, lines 16-17). This asserted motivation lacks the requisite evidence. Since the motivation lacks the

evidence required by the Federal Circuit, the motivation is improper. Since the motivation is improper, the combination is improper. Since the combination is improper, the rejection is improper, and claim 24 is allowable.

Claim 26 was rejected under 35 U.S.C. § 103 as being unpatentable over Lu in view Cai and further in view of Gloeckner and further in view of Novotny. Applicant respectfully traverses. The standards for establishing obviousness are set forth above.

As noted above, the underlying combination of Lu and Cai is improper. As such, the rejection of claim 26 is improper for at least this reason.

As further noted above, the underlying combination of Lu, Cai and Gloeckner is improper. As such, the rejection of claim 26 is improper for this reason as well.

Applicant further traverses the combination of Notovy as not being properly supported. The Patent Office asserts that the motivation to combine Notovy is "to equalize optical power of the plurality of data channels." (Office Action of May 19, 2005, page 5, line 11). This asserted motivation lacks the requisite evidence. Since the motivation lacks the evidence required by the Federal Circuit, the motivation is improper. Since the motivation is improper, the combination is improper. Since the combination is improper, the rejection is improper, and claim 26 is allowable.

Applicant requests reconsideration of the rejections in light of the remarks presented herein. Applicant earnestly solicits claim allowance at the Examiner's earliest convenience.

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By: 

Benjamin S. Withrow  
Registration No. 40,876  
P.O. Box 1287  
Cary, NC 27512  
Telephone: (919) 654-4520

Date: August 12, 2005  
Attorney Docket: 7000-469

CERTIFICATE OF TRANSMISSION

I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING  
TRANSMITTED VIA FACSIMILE ON THE DATE INDICATED  
BELOW TO:

Examiner: Wang, Quan Zhen Art Unit: 2633 Fax: 571-273-8300

Rebecca A. Hartner  
Name of Sender

  
Signature

August 12, 2005  
Date of Transmission